

# Expanding Access to Antiretroviral Therapy in Sub-Saharan Africa: Avoiding the Pitfalls and Dangers, Capitalizing on the Opportunities

We describe a number of pitfalls that may occur with the push to rapidly expand access to antiretroviral therapy in sub-Saharan Africa. These include undesirable opportunity costs, the fragmentation of health systems, worsening health care inequities, and poor and unsustainable treatment outcomes. On the other hand, AIDS "treatment activism" provides an opportunity to catalyze comprehensive health systems development and reduce health care inequities.

However, these positive benefits will only happen if we explicitly set out to achieve them. We call for a greater commitment toward health activism that tackles the broader political and economic constraints to human and health systems development in Africa, as well as toward the resuscitation of inclusive and equitable public health systems. (*Am J Public Health*. 2005;95:18–22. doi: 10.2105/AJPH.2004.040121)

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## THE GLOBAL MOVEMENT TO

reduce the price of medicines and expand access to antiretroviral therapy (ART) continues to gather momentum. In sub-Saharan Africa (SSA), the region with the highest number of people living with AIDS, millions of dollars are being directed at this cause through governments as well as through the Global Fund to Fight AIDS, Tuberculosis and Malaria, the World Bank, and bilateral overseas development aid. Private foundations such as the Gates and Clinton Foundations, and non-governmental organizations such as Médecins Sans Frontières, are providing additional funds and technical support.

The World Health Organization (WHO) has further catalyzed efforts by announcing its aim to help put 3 million people in developing countries on ART by the end of 2005. It currently estimates that only 100 000 people out of 4.1 million who need it in Africa are receiving ART.<sup>1</sup> The plans to expand access to ART are therefore bold and ambitious and are a testament to a campaign that has challenged the indifference of governments and societies to people living with AIDS and the "profiteering" of pharmaceutical companies. Just as important, the campaign around treatment access has helped motivate health workers and mobilize civil society in Africa around a struggle for health.

However, there are a number of inadequately acknowledged pitfalls associated with the push to rapidly expand access to ART in SSA. Unless the push to expand access to ART is placed within the context of a response to comprehensive health systems development, it will fail to avoid the pitfalls and undermine the desired aim of reducing AIDS-related mortality.

## THE HEALTH CARE SYSTEMS CONTEXT OF SUB-SAHARAN AFRICA

Underlying our concern is the fact that treatment expansion plans and programs are being implemented without adequate investment in strengthening the weak, and in some cases collapsing, health systems in SSA.<sup>2</sup> A large number of health care systems in SSA are currently grossly underresourced. Thirty-one African countries had total annual per capita health expenditures of \$20 or less in 2001.<sup>3</sup> The available number and skills of doctors, nurses, and other health workers fall short of what is required to deliver an adequate health service, a problem that threatens to get worse as a consequence of the international brain drain of health workers to developed countries, and the effect of HIV/AIDS itself on health workers.<sup>4</sup> In Malawi, for example, there is only 1 physi-

cian for approximately every 50 000 to 100 000 people (by contrast, a developed country may have 1 physician for every 500 people).<sup>5</sup>

The effects of this situation are clear to see in the deterioration of a number of health care indicators. The lifetime risk of a woman dying in pregnancy is now 1 in 16 in SSA.<sup>6</sup> In Malawi, the 2000 Demographic and Health Survey estimated the maternal mortality rate to be 1120 per 100 000 live births, nearly double the rate of 620 per 100 000 live births estimated in 1992.<sup>7</sup> In several countries, immunization coverage has deteriorated.<sup>8</sup> African children still die from diarrheal disease and upper respiratory tract infections, and yet the simple health care services to manage these problems remain inadequate.<sup>9,10</sup>

The additional funding to combat HIV/AIDS and increase access to ART will not change the fact that most SSA health systems have inadequate resources. In Malawi, for example, the projected addition of approximately \$40 million per annum from Global Fund grants would increase total per capita health care expenditures by less than \$4, which would still leave annual per capita health expenditures about \$10 short of the estimated \$30 required to provide full coverage for a package of essential health services, excluding ART.

In addition to enforcing public sector budget cuts, structural adjustment programs and health sector reforms imposed on many developing countries by the World Bank and the International Monetary Fund have encouraged liberalization, privatization, and the outsourcing of health care services, which has weakened public sector capacity and resulted in increasingly disorganized and fragmented health systems.<sup>2,11,12</sup> Poorly coordinated donor programs also contribute to fragmentation of the health system and undermining of public sector stewardship.<sup>13</sup> Patients, especially the poor, are increasingly vulnerable to exploitation and bad practice in an unregulated market.<sup>14</sup>

## THE PITFALLS

With an average adult HIV prevalence of 13.7% in southern Africa, we clearly need a bold and ambitious response to the HIV/AIDS epidemic. There are, however, pitfalls associated with setting overoptimistic and unrealistic targets for ART coverage without similarly bold investments in the health systems to reach these targets. One pitfall is that the expansion of access to ART can come at the expense of other vital health care services, such as maternal and child health care services, or lead to an unintended diversion of attention and resources away from HIV prevention.

There may also be opportunity costs related to development actions in other sectors. For example, it has been reported that there has been a decrease in country requests for nutrition support because of the attention being focused on HIV/AIDS.<sup>15</sup> We also note a growing tendency

to blame chronic household food insecurity and malnutrition on HIV/AIDS, at the expense of drawing attention to the more fundamental problems of global trade imbalances, the dismantling of public support for subsistence and smallholding farmers, and chronic poverty.

Within the health care sector, the current focus on ART could also overmedicalize the response to HIV/AIDS, and divert attention and funds away from the more fundamental political, social, and economic determinants of poverty and the AIDS epidemic. Although the attraction toward a “magic bullet” or technological solution is understandable, the goal of addressing AIDS and improving health in Africa will require a broad, multisectoral response to the disease and its underlying social and economic causes.

A second pitfall is that ART programs may take inappropriate shortcuts to achieve ambitious coverage targets and compromise the quality and sustainability of care. Insufficient community and patient preparation, erratic and unsustainable drug supplies, and inadequate training and support of health care providers could result in low levels of treatment adherence and an increased threat of the development of drug resistance.<sup>16</sup> If the existing batch of generic antiretrovirals becomes ineffective because of the development of viral resistance, the need to use more expensive second-line treatment regimens could result in fewer people having access to treatment in the longer run. However, governments and international agencies are increasingly being held accountable to ambitious targets, which may promote treatment

coverage at the expense of effective, long-term outcomes.

A third pitfall, arising out of the pressure to achieve quick results, is the use of inappropriate “vertical” treatment programs (i.e., the establishment of separate and parallel supply and delivery systems for ART). One manifestation of this is the use of nongovernmental personnel to deliver treatment because of their ability to set up projects quickly.<sup>17</sup> Apart from the burden of having to coordinate and monitor multiple nongovernmental treatment services, this approach threatens to further weaken the capacity of the public health system by draining skilled personnel into the (often) better-paid independent sector. At Lilongwe Central Hospital, a 970-bed facility in Lilongwe, Malawi, authorized to employ 520 nurses, currently only 169 nurses are available for clinical care. Many have left to work on nongovernmental AIDS projects.<sup>18</sup>

Although a degree of single-focus and dedicated systems and structures will be necessary to catalyze the scale-up of treatment access for AIDS, the dangers of over verticalization (whereby ART is provided through a system that stands apart from other services) are that the opportunity costs of ART programs will be magnified; that the potential to lever broader health systems development will be lost; and that the risk of unsustainable treatment will be heightened.

Furthermore, dismantling the social barriers to voluntary counseling and testing; ensuring the existence and accessibility of a functional laboratory service; establishing efficient and reliable medical supply and distribution systems; providing geographically

accessible service points; and ensuring long-term follow-up of patients receiving complex treatment clearly require a health care infrastructure that cannot be effectively or efficiently sustained through multiple, stand-alone projects. It requires a coherent, countrywide health systems approach.

In addition, the many calls for public-private partnerships to increase the coverage and speed of ART delivery are being made with little discussion about the broader implications of a shift in the public-private mix of health care systems. For example, plans to engage the private sector in the delivery of ART do not make policy distinctions between independent private for-profit health care services, the occupational health sector of the corporate sector, private medical insurance schemes, drug manufacturers and suppliers, and the nonprofit health care sector. Other plans submitted for the delivery of ART make little reference to pre-existing policy intentions to delegate state authority to semi-independent hospital boards, or to devolve health care responsibilities to local government, and reveal a disconnection between treatment objectives and a broader health systems development agenda.

Concerns about verticality and multiple nongovernmental delivery systems echo the experience and debates in the 1970s and 1980s about the shortcomings of selective primary health care and verticalized child survival programs.<sup>19–21</sup> However, little seems to have been learned from this history. In contrast, some commentators have even called for the establishment of centralized “incident command systems” modeled on disaster-response

experiences and the control of severe acute respiratory syndrome.<sup>22</sup> This makes an inappropriate comparison between the multifaceted components of a comprehensive AIDS program (which is inherently unsuited to vertical programs) with the control of an acute communicable disease outbreak, and reveals the tension between an “emergency response” to AIDS with a longer-term, sustainable public health and systems development approach.

The pitfalls highlighted in this article also include a number of threats to equity. Although the rationing of treatment is inevitable in many SSA countries, ambitious targets may lead to a preferential targeting of easier-to-reach, higher-income groups, typically living in urban areas. Without an investment in the social and economic requirements of the poor and marginalized sections of society to access treatment, ART programs could widen the inequitable health outcomes of social and geographic disparities in access to health care. A treatment-focused approach that inadequately addresses the basic needs of households, such as food security and access to water, will also limit the capacity of the poor to benefit from ART. Finally, not paying due attention to the opportunity costs of expanding access to ART could result in unintended inequities within the health care system between different patient groups.

## THE WAY FORWARD

Highlighting the pitfalls associated with the global movement to expand access to treatment can draw criticism for reflecting an overly pessimistic attitude and

undermining the campaign to expand access to treatment. Treatment activists may also dismiss these concerns because they echo the expressions of pharmaceutical companies wanting to block the use of generic medicines, or of scientists and politicians who continue to deny the existence of AIDS, or who block the justified call for antiretroviral treatment to poor communities.

However, genuine public health concerns about worsening health care inequities, undesirable opportunity costs, sustainability, and the development of drug resistance must not be construed as an obstacle to the aim of ensuring universal access to ART. Unless we acknowledge these concerns, we risk doing more harm than good. Furthermore, underplaying the challenges to equitable and sustainable ART may undermine the very health system on which the long-term success of ART programs is dependent.

On the other hand, the mobilization of resources and health activism around treatment for people living with AIDS provides an opportunity to strengthen health systems and catalyze action in a number of other vital

areas of development. However, these spin-off benefits will only be realized if ART programs are constructed in a way that *explicitly* seeks to do this.

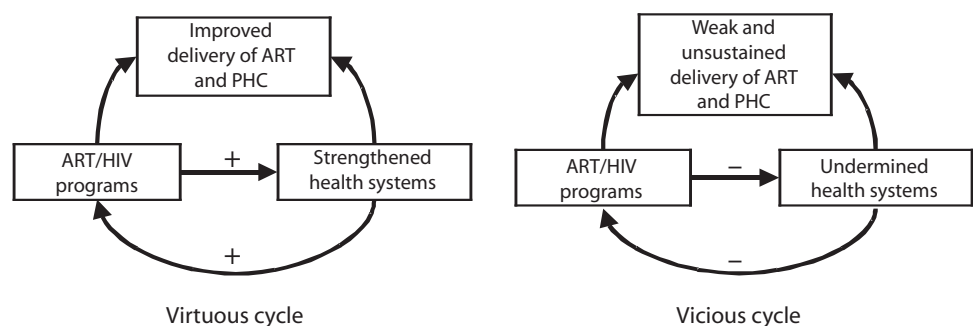
Instead of distorting the health system to quickly deliver ART (thereby weakening it further), the momentum around the expansion of ART should rather be used to build strong, integrated and effective public health systems, in particular, the human resource capacity of public health systems. This will require the Global Fund and WHO's 3-by-5 initiative to review *how* they position themselves vis-à-vis national health systems, and to promote efforts to build health systems capacities for the delivery of comprehensive primary health care, and not just selected treatments. This will allow the treatment agenda and the health systems development agenda to exist in a virtuous cycle of mutual development rather than in a vicious cycle that undermines both (Figure 1).

An explicit health systems development agenda implies the need for a much clearer vision of health systems. Such a vision must incorporate the resuscitation of health systems through

sustained funding to ensure an adequate health care infrastructure of health workers, accessible facilities, and health management systems. A critical threshold of sustained investment in health systems must be met in all countries.

African governments can contribute to this by fulfilling the pledge of the Abuja Declaration to commit 15% of their budgets to health.<sup>23</sup> However, multilateral and bilateral donors will need to come up with medium-term commitments to complement domestic financing. This would include raising official development assistance levels to 0.7% of the donor country gross national product (a target set by the United Nations decades ago<sup>24</sup>) and mitigating the effects of outflows of skilled health personnel from Africa to wealthier countries, possibly through some form of recompense.

There are also sources for revenue generation that can be sought at the global level, such as through the legitimate taxation of multinational corporation profits that currently escape national tax systems,<sup>25</sup> or through a levy placed on global financial transactions (for example, the pro-



Note. ART = antiretroviral therapy; PHC = primary health care.

**FIGURE 1—The virtuous and vicious cycles of rapid ART expansion.**

posed Tobin tax).<sup>26</sup> These suggestions are now being raised within the United Nations system and by civil society and deserve as much attention from the public health community as the effects of patents on medicine prices. The establishment of a global fund for health systems, which would complement funds raised specifically for disease programs or vaccines, should be considered.

At the same time, the cancellation of SSA's unfair debt burden<sup>27</sup> and the reform of the global trade and economic architecture that keeps poor countries and poor people poor needs to be tackled.<sup>28</sup> This will help promote other essential poverty-alleviating interventions and development priorities such as household food security, access to water and sanitation, and education. It is only by incorporating broader political and economic factors that African health policymakers and public health practitioners will escape the reality of unacceptable trade-offs and opportunity costs associated with HIV/AIDS programs.

Such proposals will require the mobilization of civil society, particularly in wealthy countries, to convince governments and global decisionmakers that debt cancellation and a doubling of the development aid budget is both feasible and just, especially in the context of rising military expenditures and growing global inequalities in wealth.<sup>29</sup>

A clear health systems vision is also needed to bring to the surface a number of policy contradictions, such as those that exist between World Bank grants for treatment programs and macroeconomic prescriptions on governments to reduce their social sector budgets. Inappropriate public sector budget ceilings im-

posed on poor governments by the International Monetary Fund must be challenged vigorously by institutions such as the World Health Organization. The contradictions between the US government's international AIDS program and its trade policy that inhibits the production of generic essential medicines and undermines the regulatory capacity of governments to implement national essential drug programs must be exposed.

Finally, a clear health systems vision needs to incorporate an unambiguous rebuttal of neoliberal health policy prescriptions that have undermined public health systems, commercialized health care, and worsened inequity. This would include reasserting and promoting the responsibility of governments to provide health care for all as a social right; progressive, equitable, and risk-sharing health-financing mechanisms; and non-segmented health systems. A coherent form of decentralization based on the principles of the District Health System needs to be rediscovered to create an organizational framework to allow for comprehensive, bottom-up planning; appropriate health care prioritization; the functional integration of the public, nonprofit, and private health care sectors; and the involvement of communities in public health actions.

In conclusion, we believe that AIDS treatment activism needs to be balanced by 2 other forms of public health activism. First, a "macroactivism" that tackles the broader political and economic causes of poverty and impoverished health systems. Second, a "health systems activism" to ensure that health systems are capacitated to provide comprehensive health care effectively,

efficiently, and equitably. In order to achieve the just demand for comprehensive health care for all, we need a different 3-by-5: one that entails the 3 prongs of macro, health systems, and treatment activism. ■

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